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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/664,234

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Yijun Ruan

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04/12/2010

ROTHWELL, FIGG, ERNST & MANBECK, P.C.

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SUITE 800

WASHINGTON, DC 20005

EXAMINER

JOHANNSEN, DIANA B

ART UNIT

PAPER NUMBER

1634

NOTIFICATION DATE

DELIVERY MODE

04/12/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/664,234	<b>Applicant(s)</b> RUAN ET AL.	
	<b>Examiner</b> Diana B. Johannsen	<b>Art Unit</b> 1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27, 29, 31-50 and 53 is/are pending in the application.
- 4a) Of the above claim(s) 1-24, 42 and 43 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39-41 is/are allowed.
- 6) ☒ Claim(s) 25-27, 29, 31-38, 44-50 and 53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **FINAL ACTION**

1. This action is responsive to the Response and Amendment filed December 29, 2009. Claims 25, 26, 39, and 44 have been amended. Claims 1-24 and 42-43 remain withdrawn (see paragraph 4, below). Claims 25-27, 29, 31-41, 44-50, and 53 remain under consideration herein. Applicant's amendments and arguments have been thoroughly reviewed, and were sufficient to overcome some of the objections/rejections set forth in the prior Office action. Any rejections and/or objections not reiterated in this action have been withdrawn. Claims 39-41 are allowed (see paragraph 3, below). However, claims 25-27, 29, 31-38, 44-50, and 53 are rejected on new grounds necessitated by applicant's amendments, as indicated below. **This action is FINAL.**
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Allowed claims***

3. Claims 40-41 remain allowed for the reasons given in the prior Office action of September 29, 2009. As applicant's amendments have overcome the remaining rejections pertaining to claim 39, that claim is now also allowed. Regarding the language of claim 39, while the limitation "the genome map" does not find explicit antecedent basis in the claim, this limitation can only reasonably be interpreted as referencing the product of the immediately preceding "mapping" step. Accordingly, the language of claim 39 is considered definite.

***Election/Restrictions***

4. Claims 1-24 and 42-43 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on December 9, 2005. In light of the species election requirement applied to claim 35 (see the restriction requirement of October 11, 2005), and applicant's election of Mmel (see the reply of December 9, 2005), restriction enzymes other than Mmel also remain withdrawn from further consideration. Election was made **without** traverse in the reply filed on December 9, 2005. Although it is noted that the rejection of claim 35 under 35 USC 102(b) has been withdrawn, the claim has been rejected under 35 USC 112, first paragraph, such that rejoinder of species does not yet apply.

***Specification***

5. Applicant's amendments to the specification of December 29, 2009 have overcome the new matter objection set forth in the prior Office action of September 29, 2009.

***Claim Rejections - 35 USC § 112, first paragraph***

**THE FOLLOWING ARE NEW GROUNDS OF REJECTION NECESSITATED BY  
APPLICANT'S AMENDMENTS:**

6. Claims 25-27, 29, 31-38, 44-50, and 53 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

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application was filed, had possession of the claimed invention. **This is a new matter rejection.**

Independent claims 25-26 have each been amended to recite steps of producing "at least one full length coding sequence of a cDNA transcript" and subsequent steps of cleaving the produced "full length coding sequence". However, the originally filed specification does not provide basis for producing and cleaving such a full length coding sequence (or sequences) of a cDNA transcript. The response points to at least paragraphs 12 and 14 of the published specification as providing support for these amendments. However, paragraph 12 discloses providing an isolated oligonucleotide comprising at least one ditag wherein the ditag may comprise a 5'-terminus sequence and a 3'-terminus sequence of a "nucleic acid molecule." Paragraph 14 then discloses that the nucleic acid molecule "may be the full-length sequence of a gene or a fragment thereof," citing as examples "full-length cDNA or cDNA". Thus, while this portion of the specification discloses providing ditags including 5'- and 3'- termini of full-length cDNAs, the "producing" and subsequent cleaving of "at least one full length coding sequence" of a cDNA transcript is not disclosed. Further, while a review of the specification reveals many similar disclosures of full length genes (e.g., paragraphs 14, 44, 48) and full length cDNAs (paragraphs 14, 52, 53, 56, 58, 90, etc.), no basis for producing/cleaving the "at least one full length coding sequence of a cDNA transcript" of the claims could be identified. Accordingly, applicant's amendments introduce new matter.

***Claim Rejections - 35 USC § 112, second paragraph***

**THE FOLLOWING ARE NEW GROUNDS OF REJECTION NECESSITATED BY  
APPLICANT'S AMENDMENTS:**

7. Claims 33-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 33-36, independent claim 33 recites the limitation "the full-length cDNA transcript from step (i)" in the last line of the claim. As a result of applicant's amendments to claim 26 (from which claim 33 depends), there is insufficient antecedent basis for this limitation in the claim.

Claim 37 also recites the limitation "the full-length cDNA transcript from step (i)" in the last line of the claim. There is insufficient antecedent basis for this limitation in the claim for the same reasons given in the immediately preceding paragraph.

***Conclusion***

8. It is noted that "Attachment A" (copy of accepted Japanese claims, filed with the response and amendment of December 29, 2009) has now been received and has been reviewed by the examiner.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diana B. Johannsen whose telephone number is 571/272-0744. The examiner can normally be reached on Monday-Friday, 8:30 am-2:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Nguyen can be reached at 571/272-0731. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diana B. Johannsen/  
Primary Examiner, Art Unit 1634